



University of  
**Salford**  
MANCHESTER

CRN: 50084

**SCHOOL OF ENVIRONMENT AND LIFE SCIENCES**

**TRIMESTER 1 EXAMINATION**

**PROGRAMMES:**

**BSc (HONS) WILDLIFE CONSERVATION WITH ZOO BIOLOGY**  
**BSc (HONS) WILDLIFE & PRACTICAL CONSERVATION**

**GLOBAL DISTRIBUTION OF WILDLIFE P1**

**DATE: Monday 14<sup>th</sup> January 2019**

**Time: 09:30 - 10:30**

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**Instructions to Candidates**

Answer ALL questions on the MCQ answer sheet provided.  
All questions carry equal marks.

## MULTIPLE CHOICE QUESTION INSTRUCTIONS

Do **NOT** remove this paper from the examination room.

This paper includes multiple-choice questions (MCQ). You must attempt all of the questions. You are provided with a specially printed sheet on which to record your answers.

**Write your name, the exam name and the date in the spaces provided at the top of the answer sheet.**

**In the section labelled STUDENT NUMBER (top right):**

- Write your registration/ID number in the boxes provided, excluding the @ sign; eg 00123456
- under each completed box, mark a line through the corresponding digit as described under 'marking instructions' and shown below.

Fill in the answers to the exam questions using the lower part of the sheet.

Each MCQ has a corresponding numbered line on the sheet with four possible answers for each question. If you think the correct answer to question 1 is 'B' then mark the form as follows:

1. [ A ] [~~B~~] [ C ] [ D ]

Use an HB-grade soft pencil to mark the boxes. Ink, ballpoint or felt-tip will not be read. Do NOT use ticks, crosses or circles. To correct a mistake, remove the pencil mark completely using an eraser.

In this exam, there is only one correct answer for each question.

Do not fold or crease the answer sheet or it will not be read by the sheet-reader. At the end of the examination, you must hand in both this question paper and your answer sheet.

- 1) Which statement best describes the underlying rock in the White Peak
  - a. Limestone and alkaline
  - b. Sandstone and alkaline
  - c. Limestone and acid
  - d. Sandstone and acid
  
- 2) In which type of soil is plant species richness highest
  - a. Alkaline
  - b. Acid
  - c. Neutral
  - d. There is no difference with soil pH
  
- 3) Why is it important to record data from replicates
  - a. In case you do something wrong
  - b. The equipment might not work when only one sample is taken
  - c. So that one improves the technique and gets more accurate results on the third attempt
  - d. Allows for the calculation of a mean and standard error thus removing some inherent variability from the data
  
- 4) What is the effect of grazing using sheep
  - a. Controls weeds
  - b. Poaches the ground
  - c. Creates space for plants to grow
  - d. Keeps the grass and other plants very short
  
- 5) Compared to the Dark Peak, the soil in the White Peak is:
  - a. Deeper
  - b. Same depth
  - c. Less deep
  - d. Very variable
  
- 6) Where would you expect to see greatest insect diversity
  - a. In grassland on acid soil
  - b. In grassland on neutral soil
  - c. In grassland on alkaline soil
  - d. Soil type does not influence insect diversity

7) What is Biogeography?

- a. The study of the interactions among organisms.
- b. The study of animal populations.
- c. The study of animal communities.
- d. The study of the geographical patterns of plant and animal species.

8) Which list has the six hierarchies in the order largest to smallest?

- a. Biosphere, Biome, Landscape, Ecosystem, Biotic community, Population
- b. Biosphere, Biome, Landscape, Ecosystem, Population, Biotic community
- c. Biosphere, Landscape, Biome, Ecosystem, Population, Biotic community
- d. Biosphere, Biome, Ecosystem, Landscape, Biotic community, Population

9) Which statement is correct

- a. Biodiversity is normally greater in the higher latitudes as compared to the lower latitudes
- b. Biodiversity is normally greater in the lower longitudes as compared to the higher longitudes
- c. Biodiversity is normally greater in the lower latitudes as compared to the higher latitudes
- d. Biodiversity is normally lower in the lower latitudes as compared to the higher latitudes

10) What is an ecosystem?

- a. A group of animals and plants.
- b. A place where animals live.
- c. A functioning entity of all the organisms in a biological system generally in equilibrium with the inputs of energy and materials in a particular environment.
- d. A biological system generally in equilibrium.



11) Which statement is a correct representation of Liebig's Law of the minimum?

- a. The total yield or biomass of any organism will be determined by the resource present in the highest concentration in relation to the requirements of that organism.
- b. The total yield or biomass of any organism will be determined by the resource present in the lowest concentration.
- c. The total yield or biomass of any organism will be determined by the resource present in the lowest concentration in relation to the requirements of that organism.
- d. The total yield or biomass of any organism will be determined by the resource present in the any concentration in relation to the requirements of that organism.

12) In which biome is Britain?

- a. Boreal Forest
- b. Temperate Forest
- c. Grassland
- d. Marine

13) The south of Britain is classified as

- a. Continental
- b. Lusitanian
- c. Atlantic south
- d. Atlantic central

14) North of the Tees-Exe line the landscape is

- a. Dominated by old hard rocks resulting in a landscape of steep relief and high summits.
- b. Dominated by relatively easily eroded Mesozoic and later rocks, often calcareous, and generally weathering to give deep soil parent materials.
- c. Dominated by soft calcareous rock that is deeply fissured.
- d. Dominated by a mixture of soft and hard rock.

15) Typical vegetation in the acid soil in the Peak District is:

- a. Improved grasses
- b. Calcareous grasses
- c. Beech and oak woodland
- d. Heather, gorse, rough grass

16) Which two factors exert the most influence on the spatial distribution of biomes?

- a. Altitude and longitude
- b. Day length and pH
- c. Temperature and water availability
- d. Temperature and pH

17) Which is a list of the FIVE major biomes

- a. Oceans, Rivers, Uplands, Lowlands, Forests
- b. Aquatic, Deserts, Forests, Grasslands, Tundra
- c. Estuaries, Rivers, Oceans, Ponds, Forests
- d. Wetlands, Oceans, Forests, Grasslands, Alps

18) What name is given to the region at the BOTTOM of a pond or lake

- a. Littoral
- b. Limnetic
- c. Profundal
- d. Abyssal

19) What name is given to the top zone in an ocean

- a. Pelagic
- b. Intertidal
- c. Benthic
- d. Abyssal

20) Which is a type of desert

- a. All of these
- b. Hot and Dry
- c. Cold
- d. Semi-arid

21) Where is the Wallace Line?

- a. Between North and South America
- b. Between Asia and Europe
- c. Between the Benthic and Pelagic zones in a lake
- d. Between Asia and Australia

22) Which is a list of adaptations seen in a moose for living in temperate forest

- a. Hooved feet, Long legs, Special molars
- b. Large horns, Long legs, Small size
- c. Hooved feet, Small Size, Special intestines
- d. Large horns, Hooved feet, Carnivorous diet

23) What is the climate found in the Mediterranean Biome

- a. Hot and dry summer, cool and rainy winter
- b. Hot and wet summer, mild and rainy winter
- c. Hot and dry summer, mild and rainy winter
- d. Hot throughout the year, more rain in winter

24) What is Sclerophyll

- a. a type of vegetation that has soft leaves, short internodes and leaf orientation parallel or oblique to direct sunlight
- b. a type of vegetation that has soft leaves, lots of spikes, that is shed in the winter
- c. a type of vegetation that has hard leaves, short internodes and leaf orientation parallel or oblique to direct sunlight
- d. a type of vegetation that has hard leaves, short internodes and needle shaped

25) Which of these is a plant adaptation to life in the desert

- a. Short roots
- b. Long roots
- c. Spreading roots close to the surface
- d. Roots that are as long as the tops

26) Which list is of adaptations to life in the Tundra

- a. Fur changes colour seasonally, insulating fat, large spreading feet, long legs, long ears.
- b. Fur changes colour seasonally, little fat, large spreading feet, long legs, short ears.
- c. Fur changes colour seasonally, insulating fat, small narrow feet, short legs, short ears.
- d. Fur changes colour seasonally, insulating fat, large spreading feet, short legs, short ears.

27) The formation of world's mountain belts is associated with

- a. Major coastlines
- a. Higher latitude areas
- b. Plate tectonic processes
- c. Igneous rocks

28) All sedimentary rocks can be classified as follows:

- a. clastic or extrusive
- b. clastic, chemical and biologic
- c. sand, silt and clay
- d. sandstone, limestone and coal

29) A lighter coloured, intrusive igneous rock is likely to be associated with soils that are:

- a. acidic and agriculturally poor
- b. shallow, but fertile
- c. coarse grained with a pH greater than 7.
- d. found in upland areas and basaltic

30) The geology of the Castleton area comprises:

- a. rocks of Carboniferous age which are entirely sedimentary
- b. rocks that can all be classified as clastic
- c. includes a small area of igneous rocks
- d. is covered widely in Quaternary age material

31) The movement of the Mam Tor landslide has been shown to correlate strongly with

- a. quarrying activity locally
- b. periods of road building and repair
- c. warm and dry weather conditions enhancing the break-up of shale
- d. positive porewater conditions in the underlying rocks

32) Over the next 100 – 1000 years Mam Tor is likely to:

- a. be reopened as a road due to increased visitor numbers to the National Park
- b. decrease in slope angle and stabilise
- c. be afforested to stabilise the site
- d. become a restricted area on the ground of visitor safety



33) In geographical terms, the tropics can be defined as the region lying between

- a. 23.5°N and 23.5°S latitude
- b. the Tropic of Cancer and the Tropic of Capricorn
- c. 23.5°W and 23.5°E longitude
- d. both a. and b. are correct

34) According to the Köppen climate classification system tropical climates are characterized by average monthly temperatures

- a. > 15°C
- b. > 18°C
- c. > 20°C
- d. > 25°C

35) In which of the following countries are Tepuis not found:

- a. Brazil
- b. Peru
- c. Venezuela
- d. Guyana

36) Carnivorous plants are a common part of the flora found on Tepuis. These plants do especially well there because soils atop Tepuis are:

- a. nutrient rich
- b. nutrient poor
- c. very deep
- d. eutrophic

37) Darwin's Finches are well known for their diversity in beak form and function. By which process did they evolve?

- a. parallel evolution
- b. adaptive radiation
- c. convergent evolution
- d. coevolution

38) The adaptation of marine iguanas to be able to shrink in length during times of food shortage and to regrow when food is abundant is linked to which periodically recurring climatological event:

- a. hurricanes
- b. La Niña
- c. El Niño
- d. none of the above

39) The Great Rift Valley encompasses which major biomes?

- a. Savannah and tropical rainforest
- b. Desert
- c. Tropical rainforest, savannah and desert
- d. Desert and savannah

40) Most soils in Africa are nutrient-poor, however, those of the Rift Valley are nutrient-rich. This is a consequence of:

- a. good drainage
- b. winds that continuously bring in nutrients from other places
- c. the particular location of the Rift Valley on the African continent
- d. volcanic activity